

ABSTRACT OF THE DISCLOSURE

A constant rate discharge pump comprises a rotary shaft which is rotatable together with a rotary driving source, a piston which is displaceable in an axial direction in a pump chamber of a body by the rotation of the rotary shaft and which has a tapered surface having diameters reduced downwardly on an outer circumference thereof, and a skirt section which is disposed on the piston and which extends radially outwardly. The constant rate discharge pump further includes a valve plug membrane of a resin material which is displaceable together with the piston, and a pressure sensor installed in the body which detects a pressure of a fluid flowing through the pump chamber.